1

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (original). A catalyst composition for the oxidation of ethane and/or ethylene to acetic acid, which composition comprises in combination with oxygen the elements molybdenum, vanadium, niobium and gold in the absence of palladium according to the empirical formula: $Mo_aW_bAu_cV_dNb_eY_f(I)$,

wherein Y is one or more elements selected from the group consisting of: Cr, Mn, Ta, Ti, B, Al, Ga, In, Pt, Zn, Cd, Bi, Ce, Co, Rh, Ir, Cu, Ag, Fe, Ru, Os, K, Rb, Cs, Mg, Ca, Sr, Ba, Zr, Hf, Ni, P, Pb, Sb, Si, Sn, Tl, U, Re, Te and La; and

a, b, c, d, e and f represent the gram atom ratios of the elements such that:

$$0 < a \le 1$$
; $0 \le b < 1$ and $a + b = 1$; $10^{-5} < c \le 0.02$; $0.4 \le d \le 0.865$; $0.135 \le e \le 0.23$; and $0.55 \le d + e \le 1$; and $0 \le f \le 2$.

2 (original). A catalyst composition as claimed in claim 1, selected from the group consisting of: $Mo_aW_bAu_cV_dNb_eY_f$, $Mo_aAu_cV_dNb_eY_f$

3 (previously presented). A catalyst composition as claimed in claim 1 or claim 2, wherein a > 0.01, 0.0001 < c \leq 0.002, 0.425 \leq d \leq 0.8, 0.14 \leq e \leq 0.20, 0.6 \leq d + e \leq 0.95, and f \leq 0.2.

4 (original). A catalyst composition as claimed in claim 3, wherein 0.0005 $< c \le 0.001, 0.45 \le d \le 0.7, e \ge 0.15, d + e \le 0.9, and f \le 0.02.$

5 (original). A catalyst composition as claimed in claim 4, wherein $d \ge 0.5$, $e \le 0.18$, and $d + e \ge 0.7$.

6 (original). A catalyst composition as claimed in claim 5, wherein d + e ≥ 0.8.

7 (previously presented). A catalyst composition as claimed in claim 1 or claim 2, wherein a=1.

8 (previously presented). A catalyst composition as claimed in claim 1 or claim 2, wherein Y is selected from the group consisting of Sn, Sb, Cu, Pt, Ag, Fe and Re.

9 (currently amended). A catalyst composition as claimed in claim 1 having the \underline{a} formula selected from the group consisting of: Mo_{1.00} $V_{0.455}Nb_{0.200}Au_{0.0008}O_{v}$; Mo_{1.00} $V_{0.547}Nb_{0.163}Au_{0.0009}O_{v}$ and Mo_{1.000}

ELLIS Appl. No. 10/530,715 May 2, 2008

 $V_{0.661}Nb_{0.174}Au_{0.0009}O_y$ wherein y is a number which satisfies the valencies of the elements in the composition for oxygen.

10 (withdrawn). A process for the selective production of acetic acid from a gaseous mixture comprising ethane and/or ethylene which process comprises contacting the gaseous mixture with a molecular oxygen-containing gas at elevated temperature in the presence of a catalyst composition as claimed in claim 1.

11 (withdrawn). A process as claimed in claim 10 in which the catalyst is used in the form of a fluidized bed.